



Human TPH1 peptide (DAG-P1274)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a member of the aromatic amino acid hydroxylase family. The encoded protein catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. Mutations in this gene have been associated with an elevated risk for a variety of diseases and disorders, including schizophrenia, somatic anxiety, anger-related traits, bipolar disorder, suicidal behavior, addictions, and others.[provided by RefSeq, Apr 2009]
Specificity	Isoform 2 seems to be less widely expressed than isoform 1.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the biopterin-dependent aromatic amino acid hydroxylase family.Contains 1 ACT domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	TPH1 tryptophan hydroxylase 1 [Homo sapiens (human)]
Official Symbol	TPH1
Synonyms	TPH1; tryptophan hydroxylase 1; TPRH; TRPH; tryptophan 5-hydroxylase 1; L-tryptophan hydroxylase; tryptophan 5-monooxygenase 1; indoleacetic acid-5-hydroxylase; tryptophan

hydroxylase (tryptophan 5-monooxygenase);

Entrez Gene ID	7166
mRNA Refseq	NM_004179.2
Protein Refseq	NP_004170.1
UniProt ID	P17752
Chromosome Location	11p15.3-p14
Pathway	Amine-derived hormones, organism-specific biosystem; Biogenic Amine Synthesis, organism-specific biosystem; Melatonin biosynthesis, tryptophan => serotonin => melatonin, organism-specific biosystem; Melatonin biosynthesis, tryptophan => serotonin => melatonin, conserved biosystem; Metabolism, organism-specific biosystem; Metabolism of amino acids and derivatives, organism-specific biosystem; SIDS Susceptibility Pathways, organism-specific biosystem; Serotonergic synapse, organism-specific biosys
Function	amino acid binding; iron ion binding; tryptophan 5-monooxygenase activity;